



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning
CHRONIC MYELOID LEUKAEMIA
(Reasonable Hypothesis)
(No. 57 of 2023)

The Repatriation Medical Authority determines the following Statement of Principles under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

Dated 24 April 2023.

The Common Seal of the
Repatriation Medical Authority
was affixed to this instrument
at the direction of:

Professor Terence Campbell AM
Chairperson

Contents

1	Name	3
2	Commencement	3
3	Authority	3
4	Repeal	3
5	Application.....	3
6	Definitions	3
7	Kind of injury, disease or death to which this Statement of Principles relates	3
8	Basis for determining the factors	4
9	Factors that must exist.....	4
10	Relationship to service.....	5
11	Factors referring to an injury or disease covered by another Statement of Principles	5
Schedule 1 - Dictionary		7
1	Definitions	7

1 Name

This is the Statement of Principles concerning *chronic myeloid leukaemia (Reasonable Hypothesis)* (No. 57 of 2023).

2 Commencement

This instrument commences on 23 May 2023.

3 Authority

This instrument is made under subsection 196B(2) of the *Veterans' Entitlements Act 1986*.

4 Repeal

The Statement of Principles concerning chronic myeloid leukaemia No. 47 of 2014 (Federal Register of Legislation No. F2014L00479) made under subsections 196B(2) and (8) of the VEA is repealed.

5 Application

This instrument applies to a claim to which section 120A of the VEA or section 338 of the *Military Rehabilitation and Compensation Act 2004* applies.

6 Definitions

The terms defined in the Schedule 1 - Dictionary have the meaning given when used in this instrument.

7 Kind of injury, disease or death to which this Statement of Principles relates

- (1) This Statement of Principles is about chronic myeloid leukaemia and death from chronic myeloid leukaemia.

Meaning of chronic myeloid leukaemia

- (2) For the purposes of this Statement of Principles, chronic myeloid leukaemia:
- (a) means a malignant neoplasm of the blood with a predominant overpopulation of the myeloid cells and the presence of a Philadelphia chromosome or a BCR-ABL1 gene or BCR-ABL1 gene product; and
 - (b) excludes:
 - (i) atypical chronic myeloid leukaemia;
 - (ii) chronic eosinophilic leukaemia;
 - (iii) chronic neutrophilic leukaemia;
 - (iv) leukemoid reactions; and

(v) myelomonocytic leukaemia.

Note 1: Chronic myeloid leukemia is also known as chronic granulocytic leukaemia, chronic myeloblastic leukaemia, chronic myelocytic leukaemia and chronic myelogenous leukaemia.

Note 2: Symptoms of chronic myeloid leukaemia can include fatigue, weight loss, excess sweating, abdominal fullness, abdominal discomfort, and bleeding episodes, but 20-50% can also be diagnosed in an asymptomatic state by incidental blood testing.

- (3) While chronic myeloid leukaemia attracts ICD-10-AM code C92.1, in applying this Statement of Principles the meaning of chronic myeloid leukaemia is that given in subsection (2).
- (4) For subsection (3), a reference to an ICD-10-AM code is a reference to the code assigned to a particular kind of injury or disease in *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM)*, Tenth Edition, effective date of 1 July 2017, copyrighted by the Independent Hospital Pricing Authority, ISBN 978-1-76007-296-4.

Death from chronic myeloid leukaemia

- (5) For the purposes of this Statement of Principles, chronic myeloid leukaemia, in relation to a person, includes death from a terminal event or condition that was contributed to by the person's chronic myeloid leukaemia.

Note: *terminal event* is defined in the Schedule 1 – Dictionary.

8 Basis for determining the factors

The Repatriation Medical Authority is of the view that there is sound medical-scientific evidence that indicates that chronic myeloid leukaemia and death from chronic myeloid leukaemia can be related to relevant service rendered by veterans, members of Peacekeeping Forces, or members of the Forces under the VEA, or members under the MRCA.

Note: *MRCA*, *relevant service* and *VEA* are defined in the Schedule 1 – Dictionary.

9 Factors that must exist

At least 1 of the following factors must as a minimum exist before it can be said that a reasonable hypothesis has been raised connecting chronic myeloid leukaemia or death from chronic myeloid leukaemia with the circumstances of a person's relevant service:

- (1) having received a cumulative equivalent dose of at least 0.01 sievert of ionising radiation to the bone marrow at least 1 year before the clinical onset of chronic myeloid leukaemia;

Note: *cumulative equivalent dose* is defined in the Schedule 1 - Dictionary.

- (2) undergoing ablative treatment with radioactive iodine for thyroid cancer before the clinical onset of chronic myeloid leukaemia, where

the first exposure occurred at least 1 year before the clinical onset of chronic myeloid leukaemia;

- (3) being obese for at least 10 years within the 20 years before the clinical onset of chronic myeloid leukaemia;

Note: *being obese* is defined in the Schedule 1 - Dictionary.

- (4) being exposed to benzene as specified:

- (a) for a cumulative total of at least 2,500 hours within a continuous period of 5 years before the clinical onset of chronic myeloid leukaemia; and
- (b) where the first exposure in that period occurred at least 5 years before the clinical onset of chronic myeloid leukaemia; and
- (c) where the last exposure in that period occurred within the 30 years before the clinical onset of chronic myeloid leukaemia;

Note: *being exposed to benzene as specified* is defined in the Schedule 1 - Dictionary.

- (5) receiving greater than 10 ppm-years of cumulative exposure to benzene before the clinical onset of chronic myeloid leukaemia, and:

- (a) where the first exposure occurred at least 10 years before the clinical onset of chronic myeloid leukaemia; and
- (b) where the last exposure occurred within the 30 years before the clinical onset of chronic myeloid leukaemia;

Note: *ppm-years* is defined in the Schedule 1 - Dictionary.

- (6) having received a kidney transplant before the clinical onset of chronic myeloid leukaemia;

- (7) inability to obtain appropriate clinical management for chronic myeloid leukaemia.

10 Relationship to service

- (1) The existence in a person of any factor referred to in section 9, must be related to the relevant service rendered by the person.
- (2) The factor set out in subsection 9(7) applies only to material contribution to, or aggravation of, chronic myeloid leukaemia where the person's chronic myeloid leukaemia was suffered or contracted before or during (but did not arise out of) the person's relevant service.

11 Factors referring to an injury or disease covered by another Statement of Principles

In this Statement of Principles:

- (1) if a factor referred to in section 9 applies in relation to a person; and

- (2) that factor refers to an injury or disease in respect of which a Statement of Principles has been determined under subsection 196B(2) of the VEA;

then the factors in that Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Schedule 1 - Dictionary

Note: See Section 6

1 Definitions

In this instrument:

8-hour time-weighted average means the averaging of different exposure levels during an average exposure period equivalent to eight hours.

being exposed to benzene as specified means:

- (a) having cutaneous contact with liquids containing benzene greater than 1% by volume;
- (b) ingesting liquids containing benzene greater than 1% by volume; or
- (c) inhaling benzene vapour where such exposure occurs at an ambient 8-hour time-weighted average benzene concentration exceeding five parts per million.

Note: **8-hour time-weighted average** is also defined in the Schedule 1 - Dictionary

being obese means having a Body Mass Index (BMI) of 30 or greater.

Note: **BMI** is also defined in the Schedule 1 - Dictionary.

BMI means W/H^2 where:

- (a) W is the person's weight in kilograms; and
- (b) H is the person's height in metres.

chronic myeloid leukaemia—see subsection 7(2).

cumulative equivalent dose means the total dose of ionising radiation received by the particular organ or tissue from external exposure, internal exposure or both, apart from normal background radiation exposure in Australia, calculated in accordance with the methodology set out in *Guide to calculation of 'cumulative equivalent dose' for the purpose of applying ionising radiation factors contained in Statements of Principles determined under Part XIA of the Veterans' Entitlements Act 1986* (Cth), Australian Radiation Protection and Nuclear Safety Agency, as in force on 2 August 2017.

Note 1: Examples of circumstances that might lead to exposure to ionising radiation include being present during or subsequent to the testing or use of nuclear weapons, undergoing diagnostic or therapeutic medical procedures involving ionising radiation, and being a member of an aircrew, leading to increased levels of exposure to cosmic radiation.

Note 2: For the purpose of dose reconstruction, dose is calculated as an average over the mass of a specific tissue or organ. If a tissue is exposed to multiple sources of ionising radiation, the various dose estimates for each type of radiation must be combined.

MRCAs means the *Military Rehabilitation and Compensation Act 2004*.

ppm-years means parts per million multiplied by years of exposure.

relevant service means:

- (a) operational service under the VEA;

- (b) peacekeeping service under the VEA;
- (c) hazardous service under the VEA;
- (d) British nuclear test defence service under the VEA;
- (e) warlike service under the MRCA; or
- (f) non-warlike service under the MRCA.

Note: *MRCA* and *VEA* are also defined in the Schedule 1 - Dictionary.

terminal event means the proximate or ultimate cause of death and includes the following:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function.

VEA means the *Veterans' Entitlements Act 1986*.